STRUTS 2 ARCHITECTURE

From a high level, Struts2 is a pull-MVC (or MVC2) framework. The Model-View-Controller pattern in Struts2 is realized with following five core components:

- **Actions**

- **Interceptors**

- **Value Stack / OGNL**

- **Results / Result types**

- **View technologies**

Struts 2 is slightly different from a traditional MVC framework in that the action takes the role of the model rather than the controller, although there is some overlap.
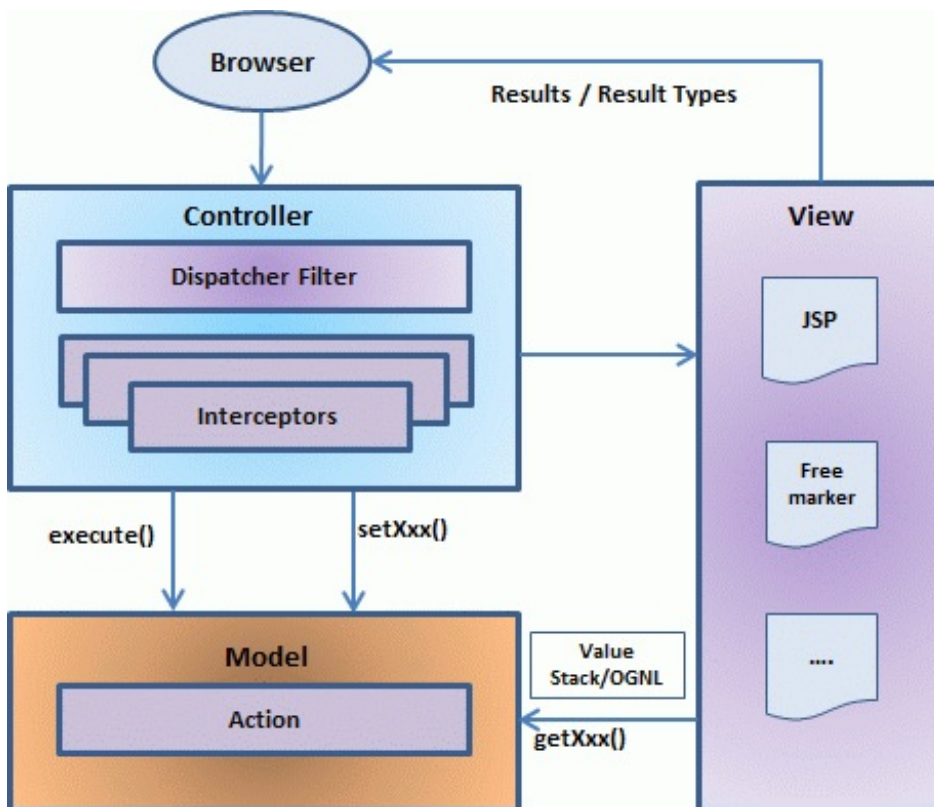
The above diagram depicts the **M**odel, **V**iew and **C**ontroller to the Struts2 high level architecture. The controller is implemented with a Struts2 dispatch servlet filter as well as interceptors, the model is implemented with actions, and the view as a combination of result types and results. The value stack and OGNL provide common thread, linking and enabling integration between the other components.

Apart from the above components, there will be a lot of information that relates to configuration. Configuration for the web application, as well as configuration for actions, interceptors, results, etc.

This is the architectural overview of the Struts 2 MVC pattern. We will go through each component in more detail in the subsequent chapters.

Request life cycle:

Based on the above digram, one can explain the user's request life cycle in Struts 2 as follows:

- User sends a request to the server for requesting for some resource (i.e pages).

- The FilterDispatcher looks at the request and then determines the appropriate Action.

- Configured interceptors functionalities applies such as validation, file upload etc.

- Selected action is executed to perform the requested operation.

- Again, configured interceptors are applied to do any post-processing if required.

- Finally the result is prepared by the view and returns the result to the user.